



PRESS RELEASE

Embargoed until 5 p.m. ET, February 18, 2009

Nancy Puckett, 312-202-5819, npuckett@sts.org

Sharon Porta, 312-202-5844, sporta@sts.org

www.sts.org/syntaxmedia

SYNTAX Trial Results Confirm Better Outcomes Using Bypass Surgery for Complex Coronary Disease

*Coronary Artery Bypass Grafting (CABG) Surgery Remains the
Standard of Care for Advanced Coronary Disease*

February 18, 2009 – A landmark article published today in the online edition of the New England Journal of Medicine (NEJM) clearly shows that coronary artery bypass grafting (CABG) surgery is better than coronary stent placement for the treatment of advanced coronary disease. The SYNTAX study article presents the long-awaited results of this major trial comparing CABG surgery to percutaneous coronary intervention (PCI), a procedure in which metal stents are placed to prop open blocked coronary arteries.

Previous studies have demonstrated the superiority of CABG surgery over coronary stents for the treatment of advanced coronary disease, but they were criticized for not using the latest and "best" type of stents – those coated with drugs to prevent closure. These stents are called drug eluting stents (DES), and some in the medical community predicted that they would prove superior to CABG surgery in the treatment of advanced coronary disease.

The SYNTAX trial directly compared stenting using DES to CABG surgery in patients with severe coronary disease. Severe disease is that which involves either the major blood vessel supplying the heart (the left main coronary artery) or all three arteries to the heart. The study found that CABG surgery was better than PCI because it resulted in fewer complications (measured as a combination of death, heart attack, stroke and recurrent angina requiring treatment). The incidence of these complications, officially termed Major Adverse Cardiovascular and Cerebrovascular Events was almost 50% higher at one year in the PCI cohort (stent group, 17.8%) as compared to the CABG cohort (surgery group, 12.1%).

"This study answers critically important questions for both primary care doctors and their patients," noted Gordon F. Murray, MD, President of The Society of Thoracic Surgeons. "Physicians were questioning whether the drug eluting stents would provide the same protection from adverse events as CABG surgery. This study proved they do not. The question in the patient's mind has always been: Why have surgery if simply placing a stent is just as good? The SYNTAX trial results disprove this notion of equal effectiveness for both methods. It actually demonstrates that CABG surgery provides markedly better results within the first year, and many experts expect this relative advantage to increase over time. In summary, for patients with severe coronary artery disease, CABG surgery is the right thing to do."

The SYNTAX trial results also indicate a strong trend toward better survival at one year after CABG (23% relative mortality benefit), a finding consistent with a previous comparison of stenting and surgery. One of the largest such studies, authored by E. L. Hannan [NEJM 2008;358:1781-92], analyzed New York State clinical data for more than 16,000 patients and demonstrated a 21% relative survival benefit at 18 months when CABG surgery outcomes were compared to DES for advanced coronary disease.

The improved outcomes following surgery in patients with advanced coronary disease demonstrated by the SYNTAX trial results point to the need for a significant change in how cardiovascular care is provided to the public. The decision regarding stents versus surgery has often been based on incomplete information and with little or no input from the patient. The SYNTAX results mandate a change in practice throughout the medical community. It is critical that before stenting is performed, clinicians provide patients with full and complete disclosure of the risks and benefits of both drug eluting and bare metal stents, including the probability of decreased survival and the increased likelihood of reintervention – further stenting or ultimately surgery – in those with advanced coronary disease.

Frederick L. Grover, MD, Chair of the Department of Surgery at the University of Colorado Denver School of Medicine, noted that patients are now empowered to participate fully in medical decision-making regarding treatment of their heart disease. "The professional organizations that represent cardiovascular specialists, including The Society of Thoracic Surgeons, have collaborated to produce [Appropriateness Criteria for Coronary Revascularization](#), which includes [a detailed table](#) that can be used by doctors and patients jointly to decide on the best method of care for the patient's coronary disease. This very easy-to-use table allows patients, with their primary care doctor or cardiologist, to plot severity of the disease with overall health status and determine an appropriate treatment strategy."

Robert A. Guyton, MD, Chief of Cardiothoracic Surgery at Emory University, spoke of patient empowerment. He said, "All patients would choose stenting as the first procedure if chances for survival were the same. However, many patients with advanced coronary artery disease would rethink that decision if they were told that they have a 20% to 40% higher chance of dying in the next three years with stents compared to CABG, as shown by Hannan's analysis of the New York State data. The key is that patients have the right to participate in decisions regarding their health care with full information about all options. This study and the recently published [Appropriateness Criteria](#) bring that goal closer to reality."

Visit www.sts.org/syntaxmedia for more information.

The Society of Thoracic Surgeons is a not-for-profit organization representing more than 5,800 surgeons, researchers, and allied health professionals worldwide who are dedicated to ensuring the best possible outcomes of heart, lung, esophageal and other surgical procedures for the chest. Founded in 1964, the mission of STS is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research and advocacy.

###